The International Code of Nomenclature for Cultivated Plants with Special Reference to Tropical Botanic Gardens

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The names of plants are of three kinds, botanical or scientific names (e.g. *Mangifera indica*), common or vernacular names (e.g. Mango), and the names of the cultivated varieties or cultivars (e.g. the Mango 'Jaffna'). The use of botanical names is governed by *The International Code of Botanical Nomenclature,* under the control of successive International Botanical Congresses; common names are gloriously free from all control, except that of common usage; cultivar names of horticultural plants have for many years been, in theory, subject to an International Code, but, until recently, the Code was virtually unknown to most horticulturists, and it is only since 1953 that a widely circulated Code has been available to those concerned with cultivated plants. It is this Code that I want to discuss in this article, and especially its importance to the naming of plants cultivated in the tropics.

The *International Code of Nomenclature for Cultivated Plants,* published in 1953, was really a combined effort of the International Botanical Congress held at Stockholm in 1950 and the International Horticultural Congress held in London in 1952. Though entitled "for Cultivated Plants", it was drawn up primarily with *horticultural* plants in mind, and it soon became clear that several modifications would have to be made if it was to be equally serviceable to agriculturists and foresters. Accordingly, a special *International Commission for the Nomenclature of Cultivated Plants* was established under the International Union of Biological Sciences, and this Commission set to work to re-formulate the Code so that it would apply satisfactorily to *all* cultivated plants. The full history of the work of the Commission is set out in the Preface to the new (1958) edition of the Code that it produced, together with the names of the agriculturists, horticulturists, foresters and botanists responsible.

The Code is obtainable from the Royal Horticultural Society in London and, since its publication, is gradually becoming known

and accepted by those concerned with the cultivation of all types of plants throughout the world.

I would strongly recommend that all those interested should obtain a copy of the Code, but it may be helpful to summarize here some of its main provisions.

(1) The Code defines a cultivar or cultivated variety as "an assemblage of cultivated individuals which are distinguished by any characters (morphological, physiological, cytological, chemical, or others) significant for the purposes of agriculture, forestry, or horticulture, and which, when reproduced (sexually or asexually), retain their distinguishing features." It recommends the use of the international word "cultivar", but allows, of course, for the use of other terms normally employed as equivalents in various languages (e.g. Variety in English, Sorte in German, etc.).

(2) The various different *kinds* of cultivars are set out and defined (i.e. clones; lines; assemblages of individuals showing genetical differences but united by one or more characteristics differentiating it from other cultivars; and f_1 hybrids of the type now common in maize and other crops).

(3) The category *strain* is not adopted in the Code; any selection showing sufficient differences from a parent cultivar to render it worthy of a name is regarded as a distinct cultivar.

(4) It is recommended that, in future, all cultivar names should be "fancy names", that is, names markedly different from botanical names in Latin form, so as to distinguish them from the names of botanical varieties. However, existing cultivar names in Latin form are not to be altered.

(5) Various rules are set out governing the choice of new cultivar names. For example, they should preferably consist of only one or two words, and must not consist of more than three; words that are excessively long or difficult to pronounce in other languages should be avoided and there are many other similar common-sense provisions.

(6) Names may, of course, be in any language, and there are regulations for transliteration and translation into other alphabets and languages. Where a cultivar name, even though transliterated or translated, is "not commercially acceptable" in other countries, it may be changed and a "commercial synonym" substituted, provided the synonym is approved by the originator of the cultivar and by the official Registration Authority concerned (see below).

(7) For cases where two or more names have been given to a single cultivar, rules are laid down for choosing the correct name.

These are, broadly speaking, based on priority of publication, but exceptions are allowed for when strict application would lead to the changing of widely used names.

(8) Rules are provided for the description of cultivars and the publication of cultivar names. Any language may be employed for the description, but the use of English, French, German, Russian or Spanish is strongly recommended.

(9) The method of *writing* cultivar names is fully dealt with. All names should be written with capitals, unless the custom of the language concerned dictates otherwise. When printing a cultivar name "in full", it should follow the botanical (or common) name of the species or hybrid concerned and should be distinguished typographically from it, preferably by presenting the botanical name in italics and the cultivar name in roman type, and by enclosing the cultivar name in *single* quotation marks, e.g. *Mangifera indica* 'Jaffna'.

(10) Full regulations are included for the naming of hybrids produced in cultivation, and their cultivars.

(11) One of the most important sections of the Code deals with the establishment of official Registration Authorities for all the main groups of cultivated plants. The primary function of these authorities is to register the names of new cultivars in their groups, in much the same way as the names of race horses or pedigree dogs are registered, thus preventing duplication and ensuring that names are in accordance with the Code; but the authorities would also be responsible for publishing basic lists of all the cultivar names in their group (to be brought up to date from time to time), approving commercial synonyms and names retained against the rule of priority, and, in general, for acting as a central clearing house and "advisory bureau" for the cultivars with which they are concerned. The aim is to establish one International Registration Authority for each group, but either as a stage towards this, or, in the bigger groups, perhaps in addition to the International Authority, National Authorities may also be desirable. For horticultural plants, International Registration Authorities are appointed by an International Horticultural Congress and national authorities by agreement between those concerned.

A number of International Authorities has already been appointed by the Horticultural Congress held at The Hague in 1955 and at Nice in 1958. These are mostly for plants grown in temperate climates (e.g. The American Iris Society for the genus *Iris* and the Royal Horticultural Society for *Rhododendron*), and there will be a great need in the future for suitable bodies to undertake

the registration of names of cultivars of ornamental and useful genera grown in the tropics. This is where tropical botanic gardens might play a very useful role, especially in acting as registration authorities for ornamental genera. An increasing number of cultivars are being produced in these genera and it is important to begin registering their names, and printing basic lists, at as early a stage as possible, so as to prevent the development of overlapping and duplication. *Bougainvillea, Hibiscus, Nerium,* and *Zinnia* are genera that spring to mind, and there are, of course, many others, both ornamental and useful, that should be included in a comprehensive scheme. It should be emphasised that, although it is highly desirable to combine cultivar trials with registration, this is not essential, and the registration of names can be carried out independently of such trials. If any botanic garden or other suitable institution in the tropics feel that they are able and willing to act as a registration authority, they should communicate with the Secretary of the International Commission, Dr. H. R. Fletcher, The Royal Botanic Garden, Edinburgh.

I hope that this very brief account of the International Code and of the registration scheme that it embodies will be of interest to those concerned with the cultivars of tropical plants, and that they will promote international co-operation in this important field by following the provisions of the Code and by helping to set up registration authorities where they are needed.